

Ser. No.10/564,929
 Amdt. dated March 11, 2008
 Reply to Office action of December 11, 2007

PF030121

Amendments to the Claims

This listing of claims 1-9 will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1 – (currently amended) A planar antenna with diversity of radiation realised on a substrate comprising a slot of closed shape dimensioned to operate at a given frequency on a mode higher than a fundamental mode in a short-circuit plane of and at least one feed-line coupled to said slot according to a line/slot transition, the perimeter of the slot being selected such that $p = k\lambda_s$ where p is the perimeter of the slot, k is an integer greater than 1 and λ_s the guided wavelength in the slot, said antenna comprising a first feed-line placed coupled in an open-circuit zone of the slot forming an open circuit and a second feed-line placed at a distance $d = (2n+1)\lambda_s/4$ from the said first line, where n is an integer greater than or equal to zero, said second feed line being coupled in a zone of the slot forming a short-circuit.

2 – (currently amended) The antenna of claim 1, wherein each feed-line terminates in an open circuit and is coupled to the slot according to a line/slot coupling such that transition, the length of the each feed line after the line/slot transition being equals to $(2k'+1)\lambda_m/4$ where λ_m is the guided wavelength under the line and k' a positive or null integer.

3 – (currently amended) The antenna of claim 1, wherein each feed-line is coupled to the slot according to a line/slot coupling transition with a microstrip line terminated by a short-circuit, located at the length of each feed line after the line/slot transition being equal to $(2k''+1)k''\lambda_m/4$ where λ_m is the guided wavelength under the line and k'' a positive or null integer.

4 – (previously amended) The antenna of claim 1, wherein each feed-line is coupled magnetically to the slot according to a tangential line/slot transition.

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5 – (previously amended) The antenna of claim 1, wherein the feed-lines are realised in microstrip technology, coplanar technology or by a coaxial cable.

6 – (previously amended) The antenna the claim 1, wherein the shape of the slot is an annular, square, rectangular, polygonal shape or is in a clover leaf form.

7 – (currently amended) The antenna of claim 6, wherein, ~~for a~~ the slot is of rectangular shape; and the feed-lines are equidistant from an axis of symmetry of the slot.

8 – (currently amended) The antenna of claim 6, wherein, ~~for a~~ the slot is of rectangular shape; and one of the feed-lines is positioned according to an axis of symmetry of the slot.

9 – (previously amended) The antenna of the claim 1, where the feed lines are connected to a transmission/reception means enabling a diversity of reception.

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Amendments to the Drawings

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes Fig. 1 and Fig. 2, replaces the original sheet including Fig. 1 and Fig. 2.

Attachment: Replacement Sheet 1
 Annotated Sheet Showing Changes